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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,217	04/14/2004	Christopher John Stephenson	020569-03403/P202-1230B-U	6286

22904 7590 03/08/2007
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EXAMINER

TUCKER, PHILIP C

ART UNIT	PAPER NUMBER
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1712

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/824,217

Applicant(s)

STEPHENSON ET AL.

Examiner

Philip C. Tucker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 106-160 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 106-110, 114-117, 122-131, 133-156 and 159 is/are rejected.
- 7) ☒ Claim(s) 111-113, 118, 120, 132, 157, 158 and 160 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date all.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 134-152 and 154 are rejected under 35 U.S.C. 102(b) as being anticipated by Gibb (4923714).

Gibb teaches a porous ceramic particulate which is used as a proppant in hydraulic fracturing or gravel packing. Such would have pores filled with air and satisfy claims 134 and 137. Such is covered by a glazing or coating material material as in claims 137 and 143 (see claims). The density is lowered as in claim 149 (see abstract).

3. Claims 106-110, 116, 117, 119, 122, 123-131, 133-136, 141-145, 149-156 and 159 are rejected under 35 U.S.C. 102(e) as being anticipated by Gunner (2006/0127363).

Gunner teaches a composition which comprises an inert carrier, wherein the carrier can be a porous ceramic particle within the scope of the present invention (0029-

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0030). In paragraph 0030 it is taught that the pores are continuous, open-ended and continuous, thus satisfying the requirement that the material have inherent or induced permeability as defined in applicant's specification. The broad teaching of a penetrating material would encompass the chemicals which penetrate the pores of the ceramic of Gunner. The ceramic particles would have air therein, which would include nitrogen as in claim 128. The particles may be used in sea water, which would contain salts which are clay stabilizers, as in claim 129 (see 0043). The particles would have properties within the scope of the present invention.

4. Claims 106-110, 114-117, 119, 123-125, 127, 128, 130, 131, 133-136, 141-145, 149, 150, 152, 154, 155, 156 and 159 are rejected under 35 U.S.C. 102(e) as being anticipated by Garg (6929199).

Garg teaches a porous ceramic particle, which has pores which are predominantly open ended, and which comprise a gas (see column 2, lines 35-44 and examples). Since the pores are open ended, such would satisfy the requirement of inherent or induced permeability of the current claims.

5. Claims 106-110, 114-116, 119, 123-125, 127, 130, 131, 133-136, 141, 142, 144, 145, 149-152 and 154 are rejected under 35 U.S.C. 102(b) as being anticipated by Sweet (5188175).

6. Sweet teaches a fracturing fluid containing proppant ceramic particles.

Applicants specification on page 12 teaches that the particles of Sweet are the same as

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the one of the present invention. Such would contain gas such as air. The current claims are thus anticipated.

7. Claims 106-110, 114-116, 119, 130,131, 133-135, 141, 142, 144, 145 and 149 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention. Applicants specification teaches tha the particles of ECONOPROP sold by Carbo Ceramics is the same as that of the present invention. Such would contain gas such as air. The claims are thus anticipated..

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 141, 150 and 153 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibb (4923714).

Gibb teaches a porous ceramic particulate which is used as a proppant in hydraulic fracturing or gravel packing. Such would have pores filled with air or fluid and satisfy claims 141. Gibb differs from the present invention in not specifying the use of the proppant in a brine. It is however well known in the art to utilize brines as fracturing fluids or gravel packing fluids, and the use of the proppant therein would be obvious from the general teaching of fracturing fluids, and gravel packing fluids by Gibb.

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10. Claims 111-113, 118, 120, 132, 157, 158 and 160 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C. Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Philip C Tucker
Primary Examiner
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PCT-4124